means for receiving the first packet by the destination node at the address of the destination node;

means for updating the accessed address to reflect a new address of the destination node responsive to a change in the address of the destination node to the new address;

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means for sending a second packet by the source node to the destination node by using the new address; and

means for receiving the second packet by the destination node at the new address of the destination node.

REMARKS

As a preliminary matter, the Examiner stated in the Office Action that the references filed with the June 30, 2000 Information Disclosure Statement are missing from the PTO file. Applicants note that the Information Disclosure Statement, a PTO form 1449, and six references were received by the PTO on June 30, 2000, as evidenced by the postcard receipt stamped by the PTO Office of Initial Patent Examination, a copy of which is attached. For the Examiner's convenience, Applicants submit herewith additional copies of the six references originally filed with the June 30, 2000 Information Disclosure Statement for the Examiner's consideration.

In the Office Action, the Examiner rejected claims 1, 5, 8, 10, 12, and 21 under 35 U.S.C. § 112, ¶ 2 as being indefinite. By this Amendment, Applicants have amended claims 1-3, 5, 8-10, 12, and 21 to distinctly point out and claim the subject matter of the invention. Care has been taken to avoid adding new matter. Applicants respectfully

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submit that claims 1, 5, 8, 10, 12, and 21, as amended, are not indefinite. Therefore, the rejections under § 112, ¶ 2 should be withdrawn.

The Examiner also rejected claims 1-24 as unpatentable under 35 U.S.C. § 103(a). In particular, the Examiner rejected claims 1-2, 4, 7-9, 11, 14-15, 17-18, 20, 22, and 24 as unpatentable over Teraoka et al., "A Network Architecture Providing Host Migration Transparency" in view of Short et al., U.S. Patent No. 6,130,892. Claims 3 and 10 were rejected as unpatentable over Teraoka et al. and Short et al. in further view of Forman et al., "The Challenges of Mobile Computing." Claims 5 and 12 were rejected as unpatentable over Francis et al., U.S. Patent No. 5,331,637, in view of Teraoka et al. and Short et al. Claims 6, 13, 16, 19, and 23 were rejected as unpatentable over Teraoka et al. and Short et al. in further view of V-One Corporation, "V-One's Smartgate VPN." Finally, claim 21 was rejected as unpatentable over Teraoka et al.

The § 103(a) rejections of claims 1-24 are traversed because a *prima facie* case of obviousness has not been made. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Id. at § 2143.01. Third, a reasonable expectation of success must exist that the proposed modification will work for the intended purpose. Id. at § 2143.02. Moreover, each of these requirements must "be

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found in the prior art, and not be based on applicant's disclosure." Id. at § 2143. For at least the reasons given below, the cited references, taken alone or combined, do not teach or suggest several elements recited in the rejected claims. Therefore, the § 103(a) rejections of claims 1-24 should be withdrawn.

Teraoka et al., used to reject all of the claims, discloses a system including a host that has two addresses - a virtual address and a physical address. Teraoka et al., p. 212, col. 1, ll. 21-25. A host's virtual address does not change even though the host may change physical addresses. Id., p. 212, col. 1, ll. 25-30. To permit this host movement, the system of Teraoka et al. provides address mapping between a host's virtual address and physical address. Id., p. 213, col. 1, ll. 45-56. A sender that does not know the host's physical address may send a message to the host's virtual address, and a router receives the message, translates the virtual address into its corresponding physical address, and sends the message to the host at the physical address. Id., p. 213, col. 1, ll. 16-25. If the host responds with a message to the sender, then the sender may obtain the host's physical address from the message and thereafter sends messages to the physical address of the host. Id., p. 213, col. 1, ll. 33-36.

The Examiner rejected claims 1-2, 4, 7-9, 11, 14-15, 17-18, 20, 22, and 24 as unpatentable over Teraoka et al., in view of Short et al., U.S. Patent No. 6,130,892. However, the teachings of Teraoka et al. and Short et al., taken alone or together, fail to disclose or suggest several elements recited in amended claims 1-2, 4, 7-9, 11, 14-15, 17-18, 20, 22, and 24.

For example, claim 1, as amended, recites sending a first packet to an address of a destination node and receiving the first packet at the address of the destination

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node. As described above, in Teroaka et al. a first message is sent to one address (i.e., the host's virtual address) and received at a different address (i.e., the host's physical address) after address mapping takes place. Teroaka et al., p. 213, col. 1, ll. 16-25. Thus, the reference does not teach or suggest sending a first packet to the same address where it is received, as recited in amended claim 1.

Furthermore, claim 1 requires receiving a first packet at an address of the destination node in combination with receiving a second packet at a new address of the destination node. As described above, in Teraoka et al., the first message, sent to the host's virtual address, and the second message, sent to the host's physical address, are both received at the same address (i.e., the host's physical address). Id. This is not the same as receiving packets at different addresses — i.e., the address of the destination node and the new address of the destination node — as recited in amended claim 1.

Still further, claim 1 recites updating an accessed address to reflect a new address responsive to a change in the address of the destination node to the new address. In contrast, in Teraoka et al., when a sender receives a message from a host, the sender learns the host's physical address corresponding to the host's virtual address, which the sender already knew. Teraoka et al., p. 213, col. 1, ll. 33-36. If this "updating" is in response to anything, it is responsive to receiving a message from the host, not a change in the address of the destination node to a new address, as recited in claim 1.

Short et al. does not correct any of the deficiencies of Teraoka et al. described above. Short et al. discloses a portable router for connecting to a network and is cited only for the teaching that routers can be implemented in software and/or hardware.

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Short et al., col. 2, ll. 29-30. Because neither Teraoka et al. nor Short et al., taken alone or combined, teaches or suggests several elements recited in claim 1, the claim is not obvious over the references and the rejection of claim 1 should be withdrawn.

Independent claims 8, 15, 18, and 22 contain similar recitations to claim 1 and are allowable over Teraoka et al. and Short et al. at least for the reasons given above with regard to claim 1. Dependent claims 2, 4, and 7 depend from claim 1. Dependent claims 9, 11, and 14 depend from claim 8. Claim 17 depends from claim 15. Claim 20 depends from claim 18. Finally, claim 24 depends from claim 22. At least because of their dependence on nonobvious claims 1, 8, 15, 18, and 22, dependent claims 2, 4, 7, 9, 11, 14, 17, 20, and 24 are nonobvious. Therefore, Applicants request the withdrawal of the rejections of claims 1-2, 4, 7-9, 11, 14-15, 17-18, 20, 22, and 24.

Claims 3 and 10 depend from claims 1 and 8 respectively and were rejected as unpatentable over Teraoka et al. and Short et al. in further view of Forman et al., "The Challenges of Mobile Computing." At least because of their dependence on nonobvious claims 1 and 8, dependent claims 3 and 10 are nonobvious. Furthermore, Forman et al. does not cure the deficiencies in Teraoka et al. and Short et al. described above. For example, Forman et al. does not teach or suggest, among other things, updating an accessed address to reflect a new address responsive to a change in the address of the destination node to the new address, as recited in claims 3 and 10 by virtue of their dependence on claims 1 and 8 respectively. Therefore, Applicants request the withdrawal of the rejections of 3 and 10.

Claims 5 and 12 depend from claims 1 and 8 respectively and were rejected as unpatentable over Francis et al., U.S. Patent No. 5,331,637, in view of Teraoka et al.

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and Short et al. At least because of their dependence on nonobvious claims 1 and 8, dependent claims 5 and 12 are nonobvious. Furthermore, Francis et al. does not cure the deficiencies in Teraoka et al. and Short et al. described above. For example, Francis et al. does not teach or suggest, among other things, updating an accessed address to reflect a new address responsive to a change in the address of the destination node to the new address, as recited in claims 5 and 12 by virtue of their dependence on claims 1 and 8 respectively. Therefore, Applicants request the withdrawal of the rejections of 5 and 12.

Claims 6, 13, 16, 19, and 23 depend from claims 1, 8, 15, 18, and 22 respectively and were rejected as unpatentable over Teraoka et al. and Short et al. in further view of V-One Corporation, "V-One's Smartgate VPN." At least because of their dependence on nonobvious claims 1, 8, 15, 18, and 22, dependent claims 6, 13, 16, 19, and 23 are nonobvious. Furthermore, "V-One Corporation" does not cure the deficiencies in Teraoka et al. and Short et al. described above. For example, "V-One Corporation" does not teach or suggest, among other things, updating an accessed address to reflect a new address responsive to a change in the address of the destination node to the new address, as recited in claims 6, 13, 16, 19, and 23 by virtue of their dependence on claims 1, 8, 15, 18, and 22 respectively. Therefore, Applicants request the withdrawal of the rejections of claim 6, 13, 16, 19, and 23.

Claim 21 was rejected as unpatentable over Teraoka et al. However, claim 21 contains similar recitations to claim 1 and is allowable over Teraoka et al. at least for the reasons given above with regard to claim 1. Therefore, Applicants request the withdrawal of the rejection of claim 21.

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In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: April 22, 2003

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APPENDIX TO AMENDMENT SHOWING CHANGES MADE

1. (Amended) A method in a distributed system for communicating in a network with a source node and a destination node, [wherein the source node and the destination node have an address,] the method comprising the steps of:

accessing [the] an address of the destination node by the source node, wherein the source node and the destination node are programs;

sending a first packet by the source node to the destination node by using the accessed address;

receiving the first packet by the destination node at the accessed address of the destination node;

updating the accessed address to reflect a new address of the destination node responsive to a change in the address of the destination node to the new address;

sending a second packet by the source node to the destination node by using the new address; and

receiving the second packet by the destination node at the new address of the destination node.

2. (Amended) The method of claim 1, wherein the source node and the destination node have a local address cache, and wherein the receiving the first packet step includes the steps of:

storing, in the local cache of the destination node, [the] an address of the sending node; and

wherein the updating step further includes the steps of:

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retrieving from the local cache of the destination node the address of the sending node;

sending a third packet containing the new address of the destination node to the source node by the destination node using the address of the source node;

receiving the third packet by the source node; and

storing, in the local cache of the source node, the new address of the destination node.

3. (Amended) The method of claim 1, wherein the distributed system has a central address store, the method further comprising the steps of:

storing [the] an address of the source node and the destination node in the central address store; and

wherein the sending a first packet step further includes the step of:

accessing the address of the destination node from the central address store; and

wherein the updating step further includes the steps of:

sending a third packet containing the new address of the destination node to the central address store by the destination node; and

storing the new address of the destination node in the central address store; and

accessing the new address by the source node.

5. (Amended) The method of claim 1, wherein the source node and the destination node have a local address cache and communicate by using a multicast

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address such that a communication sent to the multicast address is sent to a multicast group including the source node and the destination node, and wherein the updating step further includes the steps of:

sending a joining request, by the destination node, to a router to add the new address of the destination node to the multicast group;

sending a message, by the source node, to the destination node via the multicast address;

receiving the message by the destination node;

sending a third packet containing the new address of the destination node by the destination node to the source node, using [the] an address [for] of the source node;

receiving the third packet by the source node; and

storing the new address of the destination node in the local cache of the source node.

8. (Amended) A method in a distributed system for communicating in a network with a source node and a destination node, [wherein the source node and the destination node have an address,] the method comprising the steps of:

receiving a first packet by the destination node, at an address of the destination node, from the source node, the packet being addressed to the address of the destination node, wherein the source node and the destination node are programs;

updating the address of the destination node to a new address responsive to a change in the address of the destination node to the new address; and

receiving a second packet by the destination node at the new address.

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9. (Amended) The method of claim 8, wherein the destination node has a local address cache, and wherein the receiving first packet step includes the steps of:

storing, in the local cache of the destination node, [the] an address of the sending node; and

wherein the updating step further includes the steps of:

retrieving from the local cache of the destination node the address of the sending node; and

sending a third packet containing the new address of the destination node by the destination node to the source node, using the address of the source node.

10. (Amended) The method of claim 8, wherein the distributed system has a central address store, the method further comprising the steps of:

storing [the] an address of the source node and an address of the destination node in the central address store; and

[wherein the sending a first packet step further includes the step of:

accessing the address of the destination node from the central address store; and]

wherein the updating step further includes the step of:

sending a third packet containing the new address of the destination node to the central address store by the destination node.

12. (Amended) The method of claim 8, wherein the source node and the destination node have a local address cache and communicate by using a multicast address such that a communication sent to the multicast address is sent to a multicast

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group including the source node and the destination node, and wherein the updating step further includes the steps of:

sending a joining request, by the destination node, to a router to add the new address of the destination node to the multicast group;

receiving a message from the source node by the destination node, via the multicast address; and

sending a third packet containing the new address of the destination node by the destination node to the source node, using the address for the source node.

21. (Amended) A data processing system for communicating in a network with a source node and a destination node, [wherein the source node and the destination node have an address,] the data processing system comprising:

means for accessing [the] an address of the destination node;

means for sending a first packet by the source node to the destination node by using the accessed address;

means for receiving the first packet by the destination node at the address of the destination node;

means for updating the accessed address to reflect a new address of the destination node responsive to a change in the address of the destination node to the new address;

means for sending a second packet by the source node to the destination node by using the new address; and

means for receiving the second packet by the destination node at the new address of the destination node.

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